DOCUMENT RESUME

ED 325 795 CG 022 955

AUTHOR Muzekari, Louis H.; And Others
TITLE Effects of Hurricane Hugo: Mental Health Workers and Community Members.
PUB DATE Aug 90
NOTE 14p.; Paper presented at the Annual Convention of the American Psychological Association (98th, Boston, MA, August 10-14, 1990).
PUB TYPE Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Community Action; Community Coordination; Community Involvement; *Community Support; Coping; *Emergency Programs; Helping Relationship; Helplessness; *Mental Health Workers; *Natural Disasters; *Rescue
IDENTIFIERS *Hurricane Hugo; South Carolina

ABSTRACT

This paper reports the effects of Hurricane Hugo on mental health workers and indigenous community members. The response and perceptions of mental health staff from the South Carolina Department of Mental Health (Go Teams) from areas unaffected by the hurricane were compared and contrasted with those of a subsequent Hugo Outreach Support Team (HOST), the resident staff of the Charleston Area Mental Health Center (CAMHC), and residents of the extramural community. Preliminary analyses of the data indicated disbelief, bewilderment, and powerlessness felt by all three groups. The interventions of Go Team members and HOST in the community at large over time revealed a changing pattern as the community began the recovery process. Similarly, the role occupied by mental health center staff as both helper and victim is underscored. (Author)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED325795

# EFFECTS OF HURRICANE HUGO: MENTAL HEALTH WORKERS AND COMMUNITY MEMBERS

Louis H. Muzekari Frank K. Bond Thomas G. Hiers

Charleston Area Mental Health Center
Charleston, SC

CG022955

Presented at the Annual Convention of the American Psychological Association, Boston, MA., August, 1990.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Louis H. Muzekari

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

## ABSTRACT

Effects of Hurricane Hugo:

Mental Health Workers and Community Members

The present paper was intended to report the effects of Hurricane Hugo on mental health workers and indigenous community members. The response and perceptions of mental health staff from the South Carolina Department of Mental Health (Go Teams) from areas unaffected by the hurricane were compared/contrasted with those of a subsequent Hugo Outreach Support Team (H.O.S.T.), the resident staff of the Charleston Area Mental Health Center (CAMHC) and residents of the extramural community.

Preliminary analyses of the data indicate disbelief, bewilderment and powerlessness felt by all three groups. The interventions of Go Team members and H.O.S.T. in the community at large over time revealed a changing pattern as the community began the recovery process. Similarily, the role occupied by mental health center staff as both helper and victim is underscored.

# EFFECTS OF HURRICANE HUGO:

# MENTAL HEALTH WORKERS AND COMMUNITY MEMBERS

Late on the night of September 21 and early morning of September 22 Hurricane Hugo struck South Carolina and left widespread devastation up and down the coast and inland. It has been called the largest natural disaster in the United States at a cost of 6 billion dollars with the National Guard experiencing their largest call-out (7,200).

The Charleston Area Mental Health Center (CAMHC) serves an area with over 400,000 inhabitants. With the exception of the main office site, which housed one clinical program, all seven of the remaining program sites sustained moderate to severe damages and were uninhabitable. These programs were then forced to move to temporary sites or share existing space in the already cramped main center.

In response to this disaster the South Carolina Department of Mental Health (SCDMH) deployed 10% of its work force (592) from unaffected mental health centers and hospitals to serve as members of "Go Teams" that interfaced with CAMHC staff and provided crisis intervention services to the community at large.

Concurrently, the staff of the CAMHC, most of whom sustained storm damage themselves were responsible for providing services to the approximately 1500 clients of the center, a majority of whom are chronic mentally ill.

The present paper was undertaken to attempt to determine the response and perceptions of mental health workers involved in providing services in the aftermath of a major disaster. Specifically, the study addressed the differential reactions of Go Team members and those of mental health center staff and community members.

## Method

The sample consisted of four separate groups: (1) One hundred and thirty "Go Team" members who, as noted earlier, were employees of SCDMH and worked in community mental health centers and hospitals in areas of the state that were unaffected by the hurricane; (2) Twenty-four members of the Hugo Outreach Support Team (H.O.S.T.) who were hired for a year to follow the Go Teams. (3) Eighty-four staff members of the Charleston Area Mental Health Center (CAMHC) which included both clinical and administrative staff; and (4) Seventy-eight adult members of the extramural community.

## Procedure

Separate questionnaires were developed for each subject group. (1) The 17 item Go Team questionnaire included questions designed to determine their reactions to, and perceptions of, people they worked with during their tenure in Charleston as well as their own personal feelings regarding the experience. The Go Teams were operational from the day after the hurricane until approximately 7 weeks thereafter. The questionnaires were completed the week following the discontinuation of the rotating Teams; (2) A 19 item questionnaire was completed by the Hugo Outreach Support Team (H.O.S.T.) approximately seven months after the storm . This instrument was designed to capture their reactions and perceptions of the community at large; (3) A 25 item Hugo Questionnaire completed by staff of the CAMHC 2 months after Hugo also contained items focused on personal feelings and property loss, as well as reactions to working with clients; (4) Seven months after the storm 17 items from this questionnaire were re-administered to staff of the CAMHC;

(5) The questionnaire for the indigenous community members contained 11 items and inquired as to their degree and sense of loss as well as their expressed level of stress and personal reaction. This questionnaire was also administered approximately 2 months after the hurricane.

## Results and Discussion

Inasmuch as data analyses are still in progress, and a third set of questionnaires are scheduled to be administered on the anniversary of the hurricane, the following is intended to highlight findings thus far.

### Go Teams and H.O.S.T.

Table 1 reveals the major activities engaged in by the Go Teams, who worked in Charleston the first seven weeks after the hurricane, and the H.O.S.T. staff who continued their work.

Table 1

| Major Activities | Go Team | H.O.S.T. |
|---|---|---|
| (1)Professional Services | | |
| (a)Counseling/Support to survivors | 47%* | 100%* |
| (b)Children/adolescent schools | 24% | 83% |
| (c)Conducted groups/debriefing | 11% | 79% |
| (2)Advocacy (FEMA, Ins. Co., Builders, etc.) | 17% | 92%* |
| (3)Needs Assessment/Canvassing Community | 42% | 88% |
| (4)Food/Supplies/Manual Labor | 64%* | 24% |
| (5)Red Cross/Salvation Army | 45% | 75% |

*Major Contribution(s)

These data reflect a more focused effort on the part of the H.O.S.T. with the members performing a multiplicity of tasks and acting as perhaps

"casemanagers" for clients and community groups. It should also be noted that the data for the CAMHC staff on these same items essentially parallel those of the Go Teams. That is, at two months post Hugo the major activities being performed involved counseling/support and food/supplies/manual labor.

From a list of fifteen emotions/feelings, the three most observed (by rank) in the community by both the Go and H.O.S.T. teams was similar at 8 weeks and 6 months later: (1) Powerlessness, (2) Anger/Irritability, and (3) Confusion. These data perhaps reflect the fact that there were still many individuals in the community (H.O.S.T. clients) who were continuing to experience frustrations and were having difficulty in dealing with their feelings in the aftermath of the storm.

The three most dominant reactions which were experienced by both teams themselves are in Table 2.

Table 2

Dominant Reactions

| Go Team | H.O.S.T. |
|---|---|
| (1) Sadness | (1) Powerlessness |
| (2) Powerlessness | (2) Hope |
| (3) Disbelief | (3) Satisfaction |

This finding is significant and underscores the differences between staff over time in their outlook. The Go Team members worked short periods of time (day(s)) and were confronted with the disaster surrounding them (Sadness, Disbelief) while the H.O.S.T. had been in the community for 5 months. Although it is interesting to note both groups expressed feelings of powerlessness, the hope and satisfaction of the H.O.S.T. perhaps reflects

their feelings about the work they have accomplished and progress they have observed. However, as noted earlier they were in agreement with the Go Teams regarding their perceptions of community members.

When Go Team members were asked what more the SCDMH could have done in its response to the disaster a majority (59%) were concerned with issues of deployment, coordination and organization. The remainder of respondents (41%) fell into the categories of: "nothing," "good job," "best possible job under the circumstances."

In response to the question "what would you recommend be done differently given another hurricane" 90% of the Go Team members again listed organization, coordination and deployment. When asked for evaluation of their effort, the Go Teams and H.O.S.T. responses fell into the significant/very significant category 95% and 100% respectively. This reveals that both teams felt that their work had a positive impact in the community. Likewise, Go Team members' positive evaluation of their peers was unanimous.

Regarding whether Go Team members felt the amount of time they spent in Charleston was appropriate, 63% responded "about right", 28% "not long enough" and 9% "too long." Analyses of these data thus far suggest a relationship between number of days worked and activities engaged in. In addition an intervening variable is the "match" between the individuals' level of training and experience and the activity to which they were assigned. If these factors can be integrated beforehand one could expect more efficient and effective deployment of staff.

Interestingly, in light of the above, 82% of the Go Team members felt that the composition or "mix" of the team they were on was adequate. That is, the number of nurses, pharmacists, administrators, secretaries, crisis workers, counselors, phsychiatrists, mental health staff, etc. The data

suggest that this is indeed a critical factor and is related to time. For instance in the early post disaster stage more heterogeniety of teams is required and, as natural systems begin to recover, teams that are more homogenous can take over (e.g. H.O.S.T.). When the H.O.S.T. was asked this question 96% said "yes" - the mix/composition was adequate. This team is totally comprised of mental health counselors.

Over one-third (35%) of Go Team members reported that upon returning home they experienced negative feelings whereas 29% reported positive feelings. Preliminary analyses of these data suggest a relationship between duties performed and days in the field. However, this finding underscores the necessity to conduct de-briefing sessions and follow-up with departing teams before, and perhaps, after they return to their regular jobs.

Regarding the realtionship between the H.O.S.T. and the mental health centers, 84% felt the realtionship was adequate. Those responding "no" cited ongoing communication and case consultation as the major issue. Likewise, 84% felt the staff and resources of the H.O.S.T. were adequate to the evidenced need.

The interface between the H.O.S.T. and the CAMHC would be characterized by a dotted line on an organizational chart. The CAMHC provides consultation and referral on individual cases. There is ongoing communication between the "two systems", conjoint participation in Center staff meetings, and community updates and problem solving as required.

CAMHC STAFF

The damage to property and possessions reported by staff of the CAMHC was considerable at both time periods (90%). Estimated damages suffered totaled over one million dollars with an average of $17,000 per staff member.

The most pronounced effect noted in terms of disruption was either having to move temporarily or having others move in (46%). The level of stress (moderate/severe) experienced by staff revealed a significant decrease over time (75% to 24%). Likewise there was a significant decline in staff having difficulty in performing their job from 90% to 50%. The number of concerns identified as problematic also declined over time (60% to 27%), suggesting that staff were steadily putting their lives in order.

Table 3 reveals the three dominant reactions felt by CAMHC staff after two months and five months later.

Table 3

Dominant Reactions

| 1 | 2 |
|---|---|
| (1) Disbelief | (1) Hopeful |
| (2) Powerlessness | (2) Sadness |
| (3) Sadness | (3) Anger/Irritability |

It is of interest to note that the feelings of staff at two months parallel those of Go Team members at the same time period post Hugo. The fact that the staff moved from the predominant response of "Disbelief" to feeling "Hopeful" suggests movement in the recovery process.

Table 4 presents the reactions observed in other staff at the two time periods.

Table 4

Reactions Observed in Staff

| 1 | 2 |
|---|---|
| (1) Anger/Irritability | (1) Anger/Irritability |
| (2) Powerlessness | (2) Powerlessness |
| (3) Disbelief | (3) Hopeful |

This finding reveals similar perceptions at both time periods for the first two descriptors. However, noteworthy is the 3rd most frequently observed reaction (Hopeful) at post-test, (rated first in Table 3) which suggests that while staff themselves feel hopeful they are also perceiving this in fellow staff.

Table 5 reveals the reactions observed in clients at the two different time periods.

Table 5

Reactions Observed in Clients

| 1 | 2 |
|---|---|
| (1) Confusion | (1) Minimizing |
| (2) Anger/Irritability | (2) Powerlessness |
| (3) Powerlessness | (3) Anger/Irritability |

Most noteworthy in these data is a shift in the most observed reaction (Confusion) at 2 months to "Minimizing the situation" at 7 months post hurricane. Clients however still continue to present as irritable and powerless at both time periods.

Evaluation of clients' overall level of functioning did not vary significantly from 2 to 7 months post hurricane with 20% rated "somewhat worse" at both time periods.

The extent to which family and personal issues were perceived as conflicting with work revealed a reversal over time from 80% experiencing conflict at 2 months to only 20% having similar feelings at 7 months post Hugo.

CAMHC staff was somewhat more optimistic at 7 months regarding recovery from the storm, however 80% of the staff (as opposed to 91% at 2 months) felt

it would be a year or longer to recovery from the emotional effects of Hugo. Eighty-nine percent of Go Team members set recovery at a year or longer with 96% of the H.O.S.T. predicting a similar time frame.

Similarily, staff were more optimistic at 7 months in feeling the "worst" was over (92% vs. 30% at 2 months). They were also consistent over time in their recommendations of what could be done differently. The major concern identified was better organization, which is consistent with responses from the Go Teams and H.O.S.T.

Eighty percent of the Center staff reported that the work being performed by the H.O.S.T. was "significant/very significant."

Community Members

The data reported below for the adult members of the extramural community is "incomplete" in that a follow-up has not yet been completed. It is anticipated that this instrument will be repeated with the questionnaire from the CAMHC and H.O.S.T. on the anniversary of Hugo.

The noteworthy findings thus far reveal that 100% of the sample reported some property/personal loss and 55% either had to move or had others move in with them. Seventy-two percent reported moderate/severe levels of stress with the most dominant feelings being Sadness, Disbelief and Anger/Irritability.

The feelings of Sadness and Disbelief are consistent with those expressed by the Go Team and CAMHC staff. The prevalent reactions noticed in others were exactly what they themselves were feeling: Sadness, Anger/Irritability and Disbelief. Forty-two percent reported that they knew someone who could benefit from mental health services as a result of the hurricane.

When asked how long before people would recover from the emotional effects of the storm 84% said a year or more, which is consistent with the other groups.

## Summary and Conclusion

The data reveal that the effects of Hurricane Hugo are still being felt in the "low country." The time estimate given to recovery continued to be a year or more at both time periods by a majority of the respondents.

The major activities engaged in by the Go Teams and CAMHC staff reveal that in the early days following the hurricane more "brawn" was needed. The multiplicity of problems engendered by the storm, ranging from lack of food and water to homelessness, required a homogeneous team of outreach workers who were prepared "to do whatever was needed." Another factor clearly identified by the Go Teams and CAMHC staff was the need for coordination, organization and deployment of staff, as well as supplies, which were critical immediately following the disaster. Emergency preparedness plans are vital to this process as well as lessons learned from other disasters. Fortunately, the SCDMH had prior experience in disaster response which facilitated the provision of services.

In contrast, the H.O.S.T. who had been in the field 5 months were more focused in the sense that natural systems were back in place and they could concentrate their efforts on those who continued to need help and support. Indeed, 10 months after the hurricane, there were 135 phone calls following a showing of a film about Hugo on the Educational Television channel. There is still a great deal of depression in evidence as well as people reporting "just feeling lousy." This may be due in part to the fact that the physical damage

wrought by the hurricane still permeates the community and the myriad of problems associated with construction workers and insurance companies remain unresolved.

It is expected that the advent of the hurricane season will precipitate the emergence of feelings associated with Hugo and pose another challenge to community mental health staff.